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## Implementation of the Community Resilience Approach in the System of Crisis Management of Ukraine in 2022-2024

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### **Abstract:**

**Purpose:** The article examines the impact of military operations on changes in the crisis management system at the local level in Ukraine. Existing research on community resilience mainly analyses the processes of countering emergencies in peacetime (natural disasters, catastrophes, climate change, etc.), while in the case of Ukraine, the conditions of a natural experiment have developed, which at the community level manifests itself as a series of permanent emergencies resulting from the military aggression of the Russian Federation. The purpose of the article is to study the processes of implementing the Community Resilience Approach in wartime.

**Design/Methodology/Approach:** The study included 6 semi-structured interviews with people directly involved in crisis management in local communities. The respondents were selected in such a way as to cover communities that were temporarily occupied and/or under the threat of occupation and/or periodically suffered from air attacks by the Russian Federation. In parallel, we also analysed changes in Ukraine's legal framework for 2022-2024 in the context of crisis management at the local level. The interview transcripts and texts of changes in regulations were subjected to qualitative analysis using the developed code system in the MAXQDA environment.

**Findings:** Ukrainian communities demonstrate a high level of community resilience, including through networking among community members, governmental and non-governmental organisations, and the use of innovative solutions to use community resources. Authorities have proved to be less flexible than community members. Legislative changes are more inert compared to practices implemented at the local level.

**Practical Implications:** The results of the comparative analysis of Community Resilience Approach practices and the realities of regulatory changes allow Ukrainian legislators to disseminate and consolidate successful technologies in the practice of crisis management at the local level.

**Originality/Value:** The findings of the study Implementation of the Community Resilience Approach in wartime are unique because of the conditions of the natural experiment that local communities in Ukraine are experiencing. The identified tendencies toward voluntary mobilisation of community members in 'dark times' have become an important factor in the implementation of the Community Resilience Approach in Ukraine, which motivates theorists

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*to rethink the role of citizens in crisis management processes.*

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## 1. Introduction

Community resilience, in general, is a collective form of resilience, focusing on the ability of a community to respond to and recover from negative events (Kulig *et al.*, 2013). However, there is no consensus among scholars on the definition and components of community resilience, both because of the difference in approaches to defining the category of resilience (Patel *et al.*, 2017) and the complexity of defining the concept of community (Norris *et al.*, 2008), given the characteristics of a particular community, whose members independently define resilience depending on the unique context (Wilding, 2011).

While traditional researchers have largely studied community resilience in the context of natural disasters or peacetime societal challenges, the ongoing war in Ukraine offers a unique context for examining its application in the context of permanent crisis situations caused by military conflict.

The full-scale invasion of Ukraine by the Russian Federation in 2022 created an unprecedented 'natural experiment' that affected the functioning of the crisis management system at the local level. Faced with constant emergencies, Ukrainian communities were forced to adapt quickly and creatively, demonstrating varying levels of resilience. The war tested their ability to withstand and recover from shocks and highlighted the relationship between grassroots initiatives and institutional responses.

Existing research has explored the concept of community resilience in detail, particularly emphasising its role in disaster preparedness and recovery. However, little research has focused on its application in wartime scenarios. This study aims to fill this gap by examining the use of the Community Resilience Approach (CRA) in Ukraine during the ongoing conflict.

Through a combination of semi-structured interviews with crisis management practitioners and local government representatives from communities that have been and continue to be severely affected by the Russian aggression and analysis of legislative changes adopted between 2022 and 2024, the study seeks to uncover the mechanisms by which local communities are adapting to the challenges posed by the war and building resilience.

The findings of this study will contribute to the theoretical and practical understanding of CRA, especially in extreme contexts such as wartime. Moreover, the insights gained are intended to inform policymakers on institutionalising successful community-led strategies, thereby strengthening crisis management systems at local levels.

## **2. Literature Review**

Resilience is a multidisciplinary concept used in various fields to refer to the ability to withstand negative events (Gerges *et al.*, 2023; Han and Koliou, 2024; Norris *et al.*, 2008). The concept of resilience was first used in the field of mechanics to refer to the ability of a material to withstand a load. Later, the term was used in psychology to refer to the capacity of individuals to cope with adversity (Nguyen and Akerkar, 2020).

The concept of resilience was first used as a characteristic of an ecological system by C. Holling in 1973 to define the ability of ecosystems to persist and maintain their essential functions and structures despite disturbances and changes (Holling, 1973). Timmerman used resilience to assess the ability to absorb shocks and recover (Timmerman, 1981).

Resilience is the ability of a social system to cope successfully in the face of significant adversity and risk (Robertson *et al.*, 2021), namely to withstand a disruptive event, adapt to the changes brought about by the event, and retain essential functions, structure, and identity (Parker *et al.*, 2010). At the same time, given that resilience is an emergent property of a system, resilience is not a fixed state but a dynamic process that occurs over time (Matarrita-Cascante *et al.*, 2022; Patel *et al.*, 2017).

The concept of resilience is based on three interdependent and complementary characteristics of a system. The first is the ability of a system to maintain its core functions despite adverse conditions (Parker *et al.*, 2010), which is critical in the short term after a negative event occurs.

The next characteristic of the system is the ability to adjust to new conditions and change in response to a negative event (Matarrita-Cascante *et al.*, 2022; Patel *et al.*, 2017), which allows it to develop and thrive even after significant shocks (Nguyen and Akerkar, 2020). The third characteristic is the ability to recover or 'bounce back'

after a disruptive event (Patel *et al.*, 2017; Saja *et al.*, 2021), including adapting to the ‘new normal’ (Twigger-Ross *et al.*, 2011). Thus, the concept of resilience should be seen as a dynamic process rather than a statistical characteristic of a system (Bowen and Mancini, 2005; Norris and Stevens, 2007; Robertson *et al.*, 2021).

In the proposed study, a local community was defined as a group of individuals who share the following characteristics:

- residing within a defined geographical area (neighbourhood, village, town, city, or a larger region, depending on the context) (Matarrita-Cascante *et al.*, 2022);
- form a unique social system with a distinct structure, which includes formal institutions such as local authorities, schools and businesses, as well as informal networks of relationships, social groups and cultural practices (Bowen and Mancini, 2005; Gero *et al.*, 2024);
- have the opportunity to use communal resources and communal capital (Cafer *et al.*, 2019; Cheshire *et al.*, 2015; Mendoza, 2023; Patel *et al.*, 2017);
- the process in which individuals engage to distribute and exchange resources to fulfil local needs and wants (Cavaye and Ross, 2019; Cheshire *et al.*, 2015; Mendoza, 2023; Twigger-Ross *et al.*, 2011).

Thus, local communities are more than the sum of their individuals (Kaim *et al.*, 2024; Larson *et al.*, 2015; Norris and Stevens, 2007; Robertson *et al.*, 2021). At the same time, ‘a collection of resilient individuals does not guarantee a resilient community’ (Norris *et al.*, 2008, p. 128).

Therefore, community resilience is a process rather than a static state or a mere collection of attributes. Twigger-Ross (2011) defines community resilience as a process that builds upon pre-existing networks and capacities, expanding and extending them in line with identified needs. On the other hand, researchers emphasise that resilience is a process of change and adaptation of a community to function under stress (Gero *et al.*, 2024). It involves a continuous cycle of adaptation, learning, and transformation in response to challenges (Bowen and Mancini, 2005; Cavaye and Ross, 2019; Matarrita-Cascante *et al.*, 2022; Patel *et al.*, 2017).

Thus, community resilience is a process that manifests itself at the following levels:

- 1) resistance (‘holding the line’),
- 2) bounce-back (‘getting back to normal’),
- 3) adaptation (‘adjusting to a new normal’), and
- 4) transformation - ‘owning a need to change’ (Twigger-Ross *et al.*, 2011).

At the same time, given the above-mentioned belief that the value of community resilience is greater or less than the sum of individual resilience of community

members, in contrast to the Traditional Emergency Preparedness Approach (TEPA), which primarily focuses on immediate response and recovery efforts in the aftermath of a disaster (Uscher-Pines *et al.*, 2013), researchers have developed the Community Resilience approach (CRA).

CRA focuses on a community's overall capacity to adapt to a wide range of challenges (Cafer *et al.*, 2019). In contrast to TEPA, which focuses on the preparedness of individual households or organisations to respond to emergencies in terms of disaster-specific functions under plans and preparations, and focuses on the role of government agencies primarily in responding in the first few days and weeks after a crisis, the Community Resilience Approach (CRA) emphasises the role of community members working together to respond to and recover from emergencies and focuses on the process of collaboration and engagement for problem-solving, with an emphasis on leveraging assets outside of government (Uscher-Pines *et al.*, 2013).

CRA is based on bottom-up engagement and community empowerment, as opposed to the traditional top-down model used by centralised bureaucratic authorities (Gerges *et al.*, 2023; Gero *et al.*, 2024; Kruse *et al.*, 2018). CRA is more proactive (Cafer *et al.*, 2019), it prioritises local agency and knowledge, self- and collective efficacy, and social and cultural elements that can support locally appropriate solutions (Gero *et al.*, 2024).

Thus, CRA aims to build social capital, promote economic diversification, strengthen community networks, and foster a sense of belonging and shared identity (Cheshire *et al.*, 2015; Kruse *et al.*, 2018; Parker *et al.*, 2010). Thus, CRA, unlike TEPA, 1) changes approaches to risk management from reactive to proactive, 2) involves broad citizen participation in planning and decision-making, 3) includes the creation of networks among government agencies, community organisations, businesses, and residents, 4) to create a healthy, equitable, and thriving community capable of adapting to environmental changes with minimal negative consequences.

Empirical research on community resilience focuses primarily on local communities' response to local crises and adaptation to their consequences, even if these crisis situations are the result of global processes or phenomena such as climate change, epidemics, or natural disasters.

However, few researchers have studied community resilience in the context of armed conflicts before the Russian invasion of Ukraine in 2022. Given both the difficulty of conducting research during a military conflict and the predominantly short duration of hot stages of conflicts in the world in recent decades, researchers have mostly studied the consequences of conflicts, namely, the impact of the perception of insecurity on community resilience (Eshel and Kimhi, 2016), the importance of leadership and the ideology of joint 'resistance' for community

survival (Nuwayhid *et al.*, 2011), the negative effects of military conflict on the quality of governance at the local level (Kemp, 2011).

The active phase of the Russian aggression, which has been going on for more than 2.5 years, is accompanied by daily attacks aimed at the civilian population of Ukraine. At the moment, 110,991 thousand km<sup>2</sup> (18.39% of Ukraine's territory) is under Russian occupation, while 42,555 thousand km<sup>2</sup> (7.05%) has been liberated by the Ukrainian armed forces (<https://deepstatemap.live>, 10.10.2024).

Between February 2022 and September 2024, 37916 civilian casualties were recorded, including 11973 deaths. At the same time, 10223 people were killed and 24739 injured by explosive weapons with a wide area of impact, 399 and 915 people, respectively, by mines and explosive remnants of war. 74 medical institutions were destroyed and 543 were damaged, and 318 and 1112 educational institutions, respectively (Human Rights Monitoring Mission in Ukraine, 2024).

More than 10,000 claims have been submitted to the Register of Damage for Ukraine under the category of damage or destruction of residential housing (Register of Damage for Ukraine, 2024).

To prevent and respond to emergencies, Ukraine has a State Civil Protection System, which consists of hierarchical commissions on technogenic and ecological safety and emergencies, coordinated by the State Emergency Service of Ukraine Code of Civil Protection of Ukraine, 2024). At the local level, there are local structures that, even if they are formally established by local authorities, still have to coordinate their actions with higher-order structural units (Voitko *et al.*, 2024).

The willingness of Ukrainians to fight a cruel and stronger enemy and the desire to build a democratic and prosperous democracy has become the value-based foundations of society's resilience (Alexseev and Dembitskyi, 2023; Kudlenko, 2023). The unique experience of Ukrainian communities in resisting the threats of war has been the subject of research, including in the context of the role of NGOs in building community resilience (Dyakonenko and Nechytailo, 2024) and volunteers (Holovko and Holovko, 2023), including through the use of war-related marketing activism actions (Kipnis *et al.*, 2024), the role of local authorities (Rabinovych *et al.*, 2024), providing them with financial resources (Voznyak *et al.*, 2024), and the resilience of vulnerable individuals in the community (Kupenko *et al.*, 2023).

Thus, in Ukraine, in the context of constant military attacks by the Russian Federation and the limited capacity of central authorities, whose resources are primarily aimed at the country's survival, local communities are forced to independently seek solutions to effectively use their available resources to respond to emergencies and adapt to the realities of martial law. Therefore, we formulated the following research question: *'How did military aggression affect the implementation of CRA approaches at the local level in Ukraine?'*

### **3. Research Methodology**

This study is based on a qualitative approach using thematic content analysis. The study included semi-structured interviews and a purposive sampling of respondents with direct experience in crisis management and community resilience. The study also analysed changes in Ukraine's regulatory framework for 2022-2024 in the context of crisis management.

The transcripts of the interviews and the texts of the implemented changes in the regulations were analysed using closed codes. Developed a system of codes based on The emBRACE model (Kruse et al., 2018) to cover the three main dimensions of the process of building community resilience, namely: 1) Resources and Capacities, 2) Learning; 3) Actions. The structure of the codes is presented in more detail in Appendix A.

#### *Data collection process:*

Semi-structured interviews were conducted between April and May 2024, including video recording to accurately document responses and accompanying field notes. The main questions focused on crisis management, local government response and community resilience. Letters were sent to educational institutions that train specialists for the SES and conduct research in this area, to territorial communities and local units of special services of the SES. As a result, 6 interviews were conducted.

The interviews covered 2 academics, one of whom represents an educational institution located far from the contact line, while the other represents an educational institution operating quite close to the contact line. There are also respondents representing 1) local communities that have experienced occupation and have been liberated, 2) local communities that have not been occupied but are close to the contact line, and 3) local communities that are systematically affected by Russian missile attacks.

During the interviews, the respondents were asked about existing emergency response practices, the role of local initiatives in overcoming the consequences of emergencies, and the evolution of approaches to emergency response.

All participants have many years of experience working in organisations that are part of the emergency management system and/or in local authorities. The respondents provided written informed consent to participate in the study, which complies with ethical standards of data collection.

Also, an analysis of Ukrainian legislation for the period from 2022 to 2024 was conducted (see Appendix B), which provided an overview of the main regulations and their changes directly related to crisis management.

*Ensuring the reliability of the results:*

To enhance the reliability, a methodological approach was applied, including triangulation of data sources (interviews, legislation) and researchers. Interviews and legislative analysis were cross-checked to eliminate possible biases, and several researchers independently analysed the data to ensure objectivity.

*Data analysis:*

The interviews were transcribed. In addition, the transcripts underwent a thorough anonymisation process, including the removal of any identifying characteristics of the participants to protect their confidentiality. The materials were then subjected to a qualitative thematic content analysis using an inductive approach. The method allowed for the systematic categorisation of content into thematic models. The data was analysed using MAXQDA software.

The analytical process consisted of several stages, starting with coding, where individual content segments were assigned codes while maintaining their contextual relevance. These codes were then subjected to a comprehensive analysis, which led to their organisation into agreed categories that shared similar themes. Ultimately, these categories were synthesised into subthemes and major overarching themes, providing a structured framework for the in-depth understanding of the qualitative data. During this analytical process, every effort was made to ensure that robust data management and presentation practices were followed.

A parallel analysis of changes in Ukrainian legislation was also conducted to systematise and identify key trends in crisis management. After collecting documents covering various aspects of the legal framework, a preliminary review was carried out, which included the elimination of redundant or outdated provisions to ensure the relevance of the analysis. Each document was thoroughly reviewed to identify the key provisions relevant to the research topic.

The obtained materials were also subjected to qualitative thematic content analysis. First, each provision of the legislation was coded according to its context and relevance to crisis management. The coding was done using the developed codes in MAXQDA software, which allowed to systematise the information and compare it with the results of the interviews. Throughout the entire analysis process, the structure and accuracy of the data were ensured, which allowed us to create a reasonable and detailed picture of the current state of crisis management legislation.

## **4. Research Results**

### **4.1 Interviews**

During the interviews, the respondents described their professional experience in crisis management at the local level after the start of Russia's military aggression in 2022, including positive and negative practices that led to changes in the level of



community resilience known to the respondents in their local communities. At the same time, almost all respondents noted that in the first weeks of the invasion, communication between local and central authorities was disrupted, forcing local authorities to find solutions to problems that were not typical for them.

*Resources and capacities:*

According to experts, the preparedness of a particular community for emergencies largely depends on the leadership skills of the community leader. However, given the formal approaches to crisis management planning and the lack of financial resources available to local authorities, local communities were not prepared for the outbreak of full-scale military aggression.

The interviewed experts cite examples of ‘reinventing’ methods of using local resources (abandoned infrastructure, old wells, etc.) to increase community resilience. Most experts note that local authorities were forced to make changes to local budgets, thus redirecting available resources both to eliminate the consequences of aggression and to increase community resilience.

Human resources have become an important factor in community survival. In the first days of the aggression, residents, volunteers and charitable organisations helped the authorities and partly organised themselves to deal with the consequences of emergencies. At the same time, residents willingly provided housing, clothing, food, etc.

However, as one of the respondents noted, the amount of such assistance began to decrease over time, which is explained by both the exhaustion of individual household resources and the physical and psychological fatigue of residents. In addition, the interviewed experts note a certain increase in the willingness of residents to participate in preparing local communities for crisis situations and eliminating their consequences. At the same time, there are cases where highly qualified volunteers have joined the teams of local authorities over time.

Respondents whose local communities survived the occupation and were liberated or were directly on the frontline noted the importance of local knowledge (for example, for evacuating the population, and supplying food or medicine to people who were unable to evacuate).

*Learning:*

The Ukraine-Russia war is a war of innovation, and its impact on local governance is also evident. Respondents noted that during the most dangerous periods of their communities' lives, local authorities used various information technologies to exchange information with residents. At the same time, the phenomenon of ‘reinvention’ is again observed, namely the use of known technologies to solve new problems. For example, one respondent noted that when the community was under the threat of occupation, he posted a daily video blog on YouTube to inform

residents about the actions of local authorities to minimise risks to the population. In addition, innovations in various areas, from logistics to humanitarian demining, have been and are being widely used.

Respondents also emphasise the improvement of the communication system between local authorities and central government, businesses and organisations, residents' associations and individual residents. In the face of unstable telecommunications networks, local communities have learned to create flexible forms of 'communication centres', whose staff collect and disseminate information about current affairs.

At the same time, residents' trust in local authorities has increased. One respondent illustrated this fact by saying that at the beginning of the invasion, many residents were on duty outside the authorities waiting for instructions and tasks. Another respondent mentioned the facts of life-threatening rescue operations by volunteers from the occupied territories. Similarly, trust in NGOs and activists has increased.

Residents have 'learned' to help others for free, to provide their resources and housing to victims and IDPs for free, which has grown into an unprecedented volunteer movement. Residents gained experience in jointly solving problems when they were unable to receive assistance from the authorities or emergency services.

In addition, respondents noted the lack or insufficient knowledge of first aid and mine safety among residents. Some respondents reported that such training is actively conducted, but usually with the assistance of NGOs or individual activists.

A respondent whose community had survived the occupation repeatedly noted during the interview that neither the authorities nor the residents themselves were prepared for the arrival of the occupiers. The respondent emphasised the need for residents to change their behaviour during the occupation to increase their chances of survival (namely, not leaving the house at night, avoiding conflicts with the occupiers, not using a mobile phone in front of the occupiers, etc.) In addition, if evacuation is not possible, persons who work or have worked with local authorities, local activists or political leaders, provided that they have not been able to evacuate, should change their place of residence.

#### *Actions:*

The respondents spoke primarily about the activities of local communities aimed at civil protection, namely, the improvement of existing and construction of mobile shelters, the organisation of assistance to IDPs, especially from vulnerable segments of the population, and the establishment of local danger warning systems. A respondent whose community had survived the occupation stressed the need to develop an algorithm of actions for local authorities in the event of a threat of occupation (for example, to preserve the private data of its employees) and in the event of de-occupation.

In addition, he noted the impossibility of applying some of the existing procedures in Ukraine in the context of military operations. For example, there is a need to escort an evacuation convoy moving along an agreed evacuation corridor by police officers, regarded by the Russian military as representatives of the Ukrainian armed forces. Similarly, repairing and restoring critical infrastructure procedures are not adapted to a war zone.

A respondent representing the SES noted the lack of procedures for engaging volunteers in disaster relief and gaining access to underground private facilities that could serve as shelters for civilians in the absence of the owner's consent.

Respondents with experience working in local authorities gave examples of joint actions by residents to increase the resilience of the community or a part of it (namely, preparing alternative sources of drinking water, equipping communities with generators and autonomous heat sources, organising the baking and distribution of bread in the occupied community, etc.)

The analysis of the interview transcripts demonstrates two trends that have already been mentioned above: 1) the mobilisation of communities and individuals after the Russian attack, including through the creation of new networks to coordinate efforts to survive and help other community members; 2) the reinvention of innovations, namely the use of a wide range of innovations from various fields to address the challenges of increasing community resilience.

#### **4.2 Analysis of the Regulations**

Legislative regulation is a key element in ensuring the stability and efficiency of the economy. In the context of crisis management, it is important to create appropriate legal mechanisms to regulate the actions of the authorities and the population in emergencies, including in times of war or natural disasters. Given the current challenges, Ukrainian legislation has undergone certain changes that will help strengthen crisis preparedness and improve the efficiency of management processes.

##### *Resources and capacities:*

One of the main changes is the adaptation of legislation after the start of a full-scale Russian invasion in 2022, which includes several measures aimed at restoring critical infrastructure and increasing the resilience of local communities to military and emergencies. In particular, legislative initiatives provide support for the creation of backup water and energy sources based on abandoned infrastructure. This allows communities to maintain their livelihoods even in the face of the destruction of key infrastructure facilities, which is especially important during military operations.

In terms of resources, local authorities are actively adapting their budgets to allocate funds for the war aftermath and to strengthen community resilience. This has been made possible by changes to the civil protection financing legislation, which allows

financial resources to be used for emergency measures and to strengthen existing protective structures. In addition, the restoration of critical infrastructure, such as water supply and energy networks, is actively supported through state and local budgets and international grants. Such interaction between different levels of government and international partners is an important component of ensuring the resilience of communities during crisis situations.

At the same time, new regulations have been introduced that allow local authorities to cooperate with international organisations to carry out humanitarian demining and restore areas heavily affected by hostilities. In addition, these amendments provide for the construction of new shelters or the restoration of existing ones, which allows for a prompt response to threats associated with active hostilities.

Equally important, in response to the shortage of qualified personnel at the local level, particularly in the field of civil protection, lawmakers have proposed to expand the powers of local authorities to educate and train personnel. This will help to increase the level of preparedness and efficiency of emergency response. The legislative initiatives also envisage strengthening state support for the training of civil protection specialists and ensuring continuous monitoring of the qualifications of relevant personnel.

#### *Learning:*

Another important aspect is changes in approaches to education and training of civil protection personnel. Legislative initiatives, including amendments to the Civil Protection Code of Ukraine, oblige local authorities to provide training for officials, employees and citizens in first aid, mine safety and fire safety. This helps to increase the level of preparedness to respond to emergencies. In particular, it is important to cooperate with civil society organisations to provide training that promotes a culture of safety among the population.

In addition, the regulatory framework has been supplemented with important changes to the development of civil protection plans, in particular, taking into account the specific conditions of wartime.

This allows for the adaptability and effectiveness of protection measures, as well as rapid response in a constantly changing situation. At the same time, changes in legislation include new methods of informing the public, including in a format accessible to people with visual and hearing impairments. Such initiatives help to increase the coverage of people requiring a special approach.

The widespread use of new technologies to exchange information between the authorities and citizens allows for effective communication in emergencies. The use of digital platforms and Internet resources ensures prompt notification of citizens about threats, which contributes to the public's readiness to respond to threats.

*Actions:*

One of the key areas of change has been the implementation of civil protection measures, among which the construction and arrangement of mobile shelters are particularly important. Such shelters are important for ensuring the physical safety of the population during military operations and natural disasters. They allow people to be quickly placed in safe places, which is especially important in armed conflicts when access to stationary protective structures may be limited.

Local warning systems are being improved to inform citizens of threats on time. This includes information through mobile applications, telephone systems and online platforms, which allows for rapid reach to a wide range of citizens. The changes in legislation also support evacuation of the population and the activities of emergency services aimed at reducing the vulnerability of citizens in the event of emergencies.

In addition, the amendments provide for the introduction of new regulations on the organisation of rescue operations in areas affected by hostilities. This includes not only providing assistance and evacuation but also demining, clearing the territories and restoring infrastructure. At the same time, providing psychological assistance and support to victims is an important area, which is especially important for communities that have suffered serious losses.

The main areas of legislative improvement identified are: 1) legislative changes ensure the necessary adaptation of local authorities to new conditions, in particular, to strengthen community resilience; 2) cooperation with international organisations is actively developing, which contributes to humanitarian demining and restoration of territories.

## **5. Discussion**

The findings of the study demonstrate that the ongoing military operations in Ukraine have accelerated the introduction of CDA into crisis management practice at the local level. The prolonged crisis caused by military aggression has forced Ukrainian communities to adapt to unprecedented challenges, including through increased flexibility and adaptability.

### **5.1 Adaptation and Innovation at the Community Level**

The research findings show that Ukrainian communities have been the initiators of resilience building, often exceeding the adaptive capacity of official state structures. Community members have mobilised quickly, forming informal networks and using local resources to respond to crisis situations. Such grassroots activity is in line with CDA principles, including bottom-up engagement and empowerment of residents in decision-making processes. The innovative use of local infrastructure and resources highlights the creativity and determination of these communities in the face of constant threats.

## 5.2 Authorities Have Proved to be Less flexible Than Community Members

Legislative changes are more inert compared to practices implemented at the local level. Legislative changes in Ukraine in 2022-2024 were aimed at supporting the crisis management system, including reforms aimed at strengthening local capacity, efficient resource allocation and optimising emergency response. However, these changes have often lagged behind the rapidly changing realities on the ground, highlighting the existing gap between policy and practice.

Despite the challenges posed by the ongoing war, the legislative reforms demonstrate the proactive approach of the Ukrainian government to adapt the legal framework in response to the changing security environment. These changes are aimed not only at addressing current problems but also at building the long-term resilience of local communities, enabling them to better adapt to future crisis situations.

## 5.3 Key Characteristics of Community Resilience in Wartime

The study identified three key characteristics of community resilience in wartime:

*Resistance and resourcefulness:* Communities demonstrated a remarkable ability to 'hold the line' during the crisis, quickly repurposing available resources and finding innovative solutions under pressure.

*Adaptation to new realities:* The integration of technology, such as the use of social media for communication and mobilisation, demonstrates the ability of communities to adapt effectively to difficult circumstances.

*Building social capital:* The formation of trust-based networks between residents, local authorities and NGOs has been crucial in ensuring a coordinated response to emergencies.

## 5.4 The Study Identified Weaknesses in Ukraine's Crisis Management System

Initial unpreparedness of local authorities, depletion of community resources over time, psychological fatigue and exhaustion of residents proved to be significant obstacles to achieving long-term resilience. In addition, the gap between community practices and institutional frameworks points to the need to align policies with realities on the ground.

## 6. Limitation of the Study

The study has several limitations that should be taken into account when interpreting its results. One of the main limitations is related to the size of the sample and the geographical representation of the interviewed experts. The study is based on the

opinions of six experts, whose experience is valuable but cannot be generalised to the phenomenon of community resilience in wartime. In addition, these experts represent only a few regions, which may not fully reflect the diversity of problems faced by local authorities in Ukraine in the current context. Further research should include surveys with a larger number of experts and greater geographical diversity, which would increase the completeness and reliability of the results.

In addition, our study only covers legislative changes implemented since the beginning of Russia's full-scale invasion of Ukraine until 2024. The study did not take into account legislative initiatives. Given the dynamism of the legislative process, it is likely that some of these drafts may be adopted shortly and enter into force, affecting the legal environment and the resilience of local communities.

## **7. Conclusions**

This study contributes to the broader discourse on community resilience primarily through the use of empirical data collected in wartime. The results of the study show the importance of combining community initiatives with institutional measures, especially in extreme situations such as armed conflict. The Ukrainian case study also highlights the importance of developing adaptive capacity and incorporating it into formal crisis management systems.

The results of the study open up avenues for further research, including the study of the long-term impact of war on community resilience. In addition, comparing the experience of local communities from other regions affected by military conflicts can provide valuable information for generating effective CRA tools.

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### ***Appendix A. The Code System***

Dimension	Code
Resources and capacities	Place-based Resources and Capacities Socio-political Resources and Capacities Financial Resources Physical Resources and Capacities Human Resources
Learning	Risk/loss perception Problematising risk/loss Critical reflection Experimentation and Innovation, Dissemination Monitoring and Review
Actions	Civil Protection Social Protection

## ***Appendix B. List of Regulations***

1. Code of Civil Protection of Ukraine (2012), available at: <https://zakon.rada.gov.ua/laws/show/5403-17#Text>
2. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Regulation on the Unified State Civil Protection System (2014), available at: <https://zakon.rada.gov.ua/laws/show/11-2014-п#Text>
3. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Plan for Responding to National-Level Emergencies (2018), available at: <https://zakon.rada.gov.ua/laws/show/223-2018-п#Text>
4. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Classification of Emergencies by Their Levels (2004), available at: <https://zakon.rada.gov.ua/laws/show/368-2004-п#Text>
5. Resolution of the Cabinet of Ministers of Ukraine on Approval of Standard Regulations on Functional and Territorial Subsystems of the Unified State Civil Protection System (2015), available at: <https://zakon.rada.gov.ua/laws/show/101-2015-п#Text>
6. Law of Ukraine On the Legal Status of the State of Emergency (2000), available at: <https://zakon.rada.gov.ua/laws/show/1550-14#Text>
7. Law of Ukraine On Council of National Security and Defense of Ukraine (1998), available at: <https://zakon.rada.gov.ua/laws/show/183/98-бп#Text>
8. Law of Ukraine On Local Self-Government in Ukraine (1997), available at: <https://zakon.rada.gov.ua/laws/show/280/97-бп#Text>
9. Law of Ukraine on the Legal Regime of Martial Law (2015), available at: <https://zakon.rada.gov.ua/laws/show/389-19#Text>
10. Law of Ukraine on the Voluntary Association of Territorial Communities (2015), available at: <https://zakon.rada.gov.ua/laws/show/157-19#Text>
11. Law of Ukraine On Local State Administrations (1999), available at: <https://zakon.rada.gov.ua/laws/show/586-14#Text>
12. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Standard Regulations on the Regional and Local Commissions on Technogenic and Environmental Safety and Emergency Situations (2015), available at: <https://zakon.rada.gov.ua/laws/show/409-2015-п#Text>
13. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Regulations on Specialized Civil Protection Services (2015), available at: <https://zakon.rada.gov.ua/laws/show/469-2015-п#Text>
14. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for the Formation, Tasks, and Functions of Civil Protection Formations (2013), available at: <https://zakon.rada.gov.ua/laws/show/787-2013-п#Text>
15. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Evacuation in Case of Threat or Occurrence of Emergencies (2013), available at: <https://zakon.rada.gov.ua/laws/show/841-2013-п#Text>
16. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for the Creation and Use of Material Reserves for Preventing and Eliminating the Consequences of Emergencies (2015), available at: <https://zakon.rada.gov.ua/laws/show/775-2015-п#Text>
17. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Regulations on the Organization of Emergency Alert and Communication in the Field of Civil Protection (2017), available at: <https://zakon.rada.gov.ua/laws/show/733-2017-п#Text>
18. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Preparing Management Bodies and Civil Protection Forces for Their Designated Tasks

(2013), available at: <https://zakon.rada.gov.ua/laws/show/443-2013-п#Text>

19. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Financing Emergency Prevention and Response (1999), available at:

<https://zakon.rada.gov.ua/laws/show/140-99-п#Text>

20. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Developing Activity Plans for the Unified State Civil Protection System (2017), available at:

<https://zakon.rada.gov.ua/laws/show/626-2017-п#Text>

21. Resolution of the Cabinet of Ministers of Ukraine on Certain Issues Regarding the Use of Civil Protection Shelters (2017), available at: <https://zakon.rada.gov.ua/laws/show/138-2017-п#Text>

22. Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for Training the Population in Actions in Emergency Situations (2013), available at:

<https://zakon.rada.gov.ua/laws/show/444-2013-п#Text>